

REMARKS

Upon entry of the present amendment, claims 1-23 will remain pending in this application. Applicants respectfully submit that no new matter is added in the above amendments.

In the outstanding Office Action, Claims 1-23 stand rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by United States Patent Application Publication No. 2003/0101169 ("Bhatt") in view of United States Patent No. 5,859,972 ("Subramaniam"). Applicants respectfully traverse.

Claims 1-15

Independent claims 1 and 10 are directed to techniques for compiling a query including an extensible markup language (XML) based expression with instructions to modify data that is stored in a node of an XML schema. As part of these techniques, an abstract syntax tree corresponding to the expression is transformed into a unified tree including XML based algebra operations. The XML based algebra operations in the unified tree are mapped to relational algebra based operations in a relational tree. Both the XML based algebra operations and the relational algebra based operations comprise instructions for modifying the data that is stored in the node of the instance of the XML schema.

Bhatt discloses an XQL engine that parses and translates queries into a structure that can be executed against an XML stored engine (Bhatt, ¶0036). Bhatt discloses a number of different techniques whereby the XQL engine can translate queries with instructions to *retrieve* data XML from the XML store. However, Bhatt fails to teach, suggest or even mention any techniques whereby the XQL engine can translate queries with instructions to *modify* XML data in the XML store.

Thus, Bhatt does not teach or suggest "wherein the extensible markup language based algebra operations and the relational algebra based operations comprise instructions for modifying the data that is stored in the node of the instance of the extensible markup language schema," as recited in independent claims 1 and 10. Accordingly, Applicants respectfully submit that independent claims 1 and 10 are not anticipated by Bhatt. Applicants further submit that claims 2-9 and 11-15 are patentable at least by reason of their dependency.

Claims 16-23

Independent claims 16 and 20 recite that a query is parsed to yield an XML based expression. A query plan is then generated for the XML expression including enhanced relational algebra expressions with a nested table abstraction operation that enables a parent to descendent relationship to be established among instances of nodes in an extensible markup language schema without compiling separate lists corresponding to each of the nodes.

Bhatt discloses an XQL engine that can generate query plans for queries that request data from parent and descendant nodes. However, the parent to descendant relationship between instances of these nodes is established by compiling a list of instances of the parent node, a list of instances of the descendant node, and then comparing the two separate lists to establish the corresponding descendant instances for each parent instance (Bhatt, ¶0129-0145).

Thus, Bhatt does not teach or suggest "a nested table abstraction operation that enables a parent to descendent relationship to be established among instances of nodes in an extensible markup language schema without compiling separate lists corresponding to each of the nodes," as recited in independent claims 16 and 20. Accordingly, Applicants respectfully submit that independent claims 16 and 20 are not anticipated by Bhatt. Applicants further submit that claims 17-19 and 21-23 are patentable at least by reason of their dependency. Thus, reconsideration and withdrawal of the 35 U.S.C. § 102(e) rejections are respectfully requested.

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CONCLUSION

In view of the above amendments and remarks, Applicants respectfully submit that the present application is in condition for allowance. In view of the above amendments and following remarks, Applicants respectfully request reconsideration of the present application.

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/Kenneth R. Eiferman/

Kenneth R. Eiferman

Registration No. 51,647

Woodcock Washburn LLP
Cira Centre, 12th Floor
2929 Arch Street
Philadelphia, PA 19104-2891
Telephone: (215) 568-3100
Facsimile: (215) 568-3439